

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,618	02/12/2001	Martin Sommer	SGW-109	9111
23599	7590 08/29/2002			
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400			EXAMINER	
			CHEVALIER, ALICIA ANN	
ARLINGTON	I, VA 22201		ART UNIT	PAPER NUMBER
			1772	6
			DATE MAILED: 08/29/2002	~

Please find below and/or attached an Office communication concerning this application or proceeding.

				69			
		Application No.	Applicant(s)				
Office Action Summary		09/780,618	SOMMER ET AL.				
		Examin r	Art Unit				
	TI WAN DO DATE OU	Alicia Chevalier	1772				
The MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply							
THE - Ext afte - If th - If N - Fai - Any	HORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1. er SIX (6) MONTHS from the mailing date of this communication. he period for reply specified above is less than thirty (30) days, a re- lo period for reply is specified above, the maximum statutory period lure to reply within the set or extended period for reply will, by statury reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, ply within the statutory minimun d will apply and will expire SIX (i te, cause the application to bec	may a reply be timely filed n of thirty (30) days will be considered timel B) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on	·					
2a) <u></u>	This action is FINAL . 2b)⊠ T	his action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)区	Claim(s) 1-10 is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)[Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10</u> is/are rejected.							
7)	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.							
Applica	tion Papers						
9)[The specification is objected to by the Examin	er.					
10)	The drawing(s) filed on is/are: a) acce	epted or b) Dobjected to	by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority	under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ⊠ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) 🔀 Not 2) 🔲 Not	ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Not	erview Summary (PTO-413) Paper No ice of Informal Patent Application (PT er:	· ·			

Art Unit: 1772

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on February 11, 2000. It is noted, however, that applicant has not filed a certified copy of the ribbon application copy as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement filed February 12, 2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because an english translation, an english abstract or search report has not been provided for the foreign documents; DE 149661, DE 1254301, DE 221897-11.5.51, DE 2018752, and DD 129413. Also, a copy of the listed German search report dated 100CT00 was not found. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Specification

3. The specification is objected to because of the following informalities: the specification lacks section headings.

Art Unit: 1772

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
 - REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Art Unit: 1772

Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development</u>: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, <u>Reference to a "Microfiche Appendix</u>": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37

 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and

Page 4

Art Unit: 1772

preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

Page 5

- (g) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) <u>Sequence Listing.</u> See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Art Unit: 1772

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-7 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-5 and 9 are rejected under 35 U.S.C. 112, second paragraph for being in improper alternative language. Proper language for a markush group in a claim is "where in R is a material selected from the group consisting of A, B, C, and D," MPEP 2173.05.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation consists of a brittle-fracture material, and the claim also recites "especially" glass, glass ceramic or ceramic which is the narrower statement of the range/limitation. Also, claim 6 recites the broad recitation the

Art Unit: 1772

opening has the shape of a through-going cylindrical opening or through-going conical opening, and the claim also recites "especially" the shape of a corresponding hole which is the narrower statement of the range/limitation. Claim 7 recites the broad recitation the molded element is part of a laminated glass system, and the claim also recites "especially" part of a laminated glass system with electrochromic properties which is the narrower statement of the range/limitation.

Claim 9 recites the broad recitation the molded element and the sealing element are bonded by means of welding by movement, and the claim also recites "e.g." ultrasound weld, high-frequency welds, rotary welds, friction welds, torsional or orbital welds, cold pressure welds or abrasive welds which is the narrower statement of the range/limitation. Claim 10 recites the broad recitation the molded element and/or the sealing element is at least partially coated, and the claim also recites "especially" metal- and/or plastic-coated which is the narrower statement of the range/limitation.

The term "platelike" in claim 5 is unclear which renders the claim vague and indefinite.

The addition of the word "like" to an otherwise definite expression extends the scope of the expression so as to render it indefinite.

Claim 6 is unclear in scope which renders it vague and indefinite. The limitation "the opening has ... the shape of a corresponding hole" is unclear. Is the corresponding hole an adjacent hole or a hole on another sheet?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1772

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 3, 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ahn et al. (3,852,877).

Ahn discloses a multiplayer circuit comprising layered ceramic green sheets, each sheet is provided with at least one cylindrical through-holes and the holes are filled with a metallization paste. The metallization paste also partially covers the sheets. The metallization paste is hermetically bonded to the ceramic material. See column 2, line 66 through column 5, line 11 and figures 2 and 2a.

8. Claims 1, 2, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Wainer (4,073,989).

Wainer discloses a ceramic plate comprising a plurality of cylindrical holes filled with a metallic conductor. The type metal has the property of expending very slightly on cooling so that the cooled article will then hermetically seal each hole with a preformed wire of metal. See column 1, line 55 to column 2, line 4, column 11, 39-42 and figures 1a and 2a.

Claim Rejections - 35 USC § 102/103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1772

10. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ahn et al. (3,852,877).

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation bonded by means of connecting pressure welds or by means of welding by movement is a method of production and therefore does not determine the patentability of the product itself.

11. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wainer (4,073,989).

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim,

the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is <u>NOT</u> discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPO 324 (CCPA 1974).

Page 10

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation bonded by means of connecting pressure welds or by means of welding by movement is a method of production and therefore does not determine the patentability of the product itself.

12. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Myers (4,152,712).

Myers discloses an optoelectronic display comprising a glass insulating member comprising at least one cylindrical opening with a spherical gallium arsenide crystal bonded in the opening. The glass insulating member and gallium arsenide crystal are coated with a conductive layer and an annular fillet. See column 2, line 44 to column 3, line 4 and figure 1.

Although Myers does not explicitly teach the limitations hermetically sealed, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of production steps (i.e. laminating and sealing material) used to produce the display. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205

Art Unit: 1772

USPQ 594. In the alternative, the claimed hermetically sealed would obviously have been provided by the process disclosed by Myers. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation bonded by means of connecting pressure welds or by means of welding by movement is a method of production and therefore does not determine the patentability of the product itself.

13. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tukude (4,702,566).

Art Unit: 1772

Tukude discloses an electrochromic display device comprising inter alia a counter substrate comprising a plurality of through holes filled with conductive metal and partially coated with conductors. The counter substrate may be made of glass or ceramics. See column 3, lines 28-30, column 5, lines 51-66 and figure 5.

Although Tukude does not explicitly teach the limitations hermetically sealed, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of production steps (i.e. sealing the through holes) used to produce the display. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed hermetically sealed would obviously have been provided by the process disclosed by Tukude. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-

Art Unit: 1772

process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation bonded by means of connecting pressure welds or by means of welding by movement is a method of production and therefore does not determine the patentability of the product itself.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.